



THE UNIVERSITY *of* EDINBURGH

## Edinburgh Research Explorer

### The role of human resource practices and group norms in the retirement process.

**Citation for published version:**

Potocnik, K, Tordera, N & Peiro, JM 2009, 'The role of human resource practices and group norms in the retirement process.', *European Psychologist*, vol. 14, no. 3, pp. 193-206. <https://doi.org/10.1027/1016-9040.14.3.193>

**Digital Object Identifier (DOI):**

[10.1027/1016-9040.14.3.193](https://doi.org/10.1027/1016-9040.14.3.193)

**Link:**

[Link to publication record in Edinburgh Research Explorer](#)

**Document Version:**

Peer reviewed version

**Published In:**

European Psychologist

**Publisher Rights Statement:**

This article does not exactly replicate the final version published. Please cite the published article:  
© Potocnik, K., Tordera, N., & Peiro, J. M. (2009). The role of human resource practices and group norms in the retirement process. *European Psychologist*, 14(3), 193-206. [10.1027/1016-9040.14.3.193](https://doi.org/10.1027/1016-9040.14.3.193)

**General rights**

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

**Take down policy**

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact [openaccess@ed.ac.uk](mailto:openaccess@ed.ac.uk) providing details, and we will remove access to the work immediately and investigate your claim.



FULL TITLE: The role of human resource practices and group norms in the retirement process

Kristina Potočník<sup>1</sup>, Nuria Tordera<sup>1</sup>, and Jose Maria Peiró<sup>1, 2</sup>

University of Valencia<sup>1</sup>

Instituto Valenciano de Investigaciones Económicas (IVIE)<sup>2</sup>

\*Further requests regarding this manuscript should be addressed to Kristina Potočník, Faculty of Psychology, Department of Social Psychology, Avda. Blasco Ibáñez 21, 46010 Spain. Phone number: 0034963864964; Fax: 0034963864668; E-mail: kristina.potocnik@uv.es.

\*\*This study was supported by the Spanish Agency of Education and Science (SEJ2005-05375, within the CONSOLIDER project SEJ2006-14086). Research work also sponsored by the Generalitat Valenciana, Spain (I+D+I groups, 03/195).

## ABSTRACT

The present study analyzes retirement intentions and behavior as part of a work role withdrawal process. We examine the influences of the organizational and group contexts in the process of work role exit by means of two sources of work role expectations: human resource practices and group norms. Three different types of human resource practices were taken into consideration: performance enhancement practices, retirement enhancement practices, and organizational pressures toward retirement. Furthermore, three types of retirement indicators were analyzed: age considering retirement for the first time, early retirement intentions and retirement age. Hierarchical regression analyses were carried out on a sample of 270 retirees to test the hypotheses. Results showed that retirement enhancement practices and organizational pressures toward retirement predict all the retirement indicators. Moreover, group norms moderated the relationships between retirement enhancement practices and two out of the three outcomes: age considering retirement for the first time and retirement age. Overall, our findings showed that organizational and group contexts play an important role in the retirement process. Moreover, our results indicate an interaction between organizational and group factors in the work role exit process.

**KEY WORDS:** work role exit; retirement age; retirement intentions; group norms; human resource practices.

## The role of human resource practices and group norms in the retirement process

Early retirement is becoming a worrisome phenomenon for developed countries. This situation, together with the general trend of increasing life expectancy, challenges the viability of social security systems. Moreover, early retirement may represent a waste of human and social capital in the labor force. Specifically in Spain, the evidence shows that only four out of ten Spanish citizens between 55 and 64 years of age are actively employed (Eurostat, 2006). Moreover, the statistics show that the percentage of the Spanish population over 60 years of age will increase from 21.7 % in 2005 to 39.0% of the total population by 2050 (United Nations, 2007). A similar trend is observed in other western countries. This situation has produced an increasing interest in studying the retirement process in order to contribute to designing employment strategies to retain older employees in organizations (Waldman & Avolio, 1993; Maurer, Wrenn, & Weiss, 2003; Elovainio et al., 2005; Sutinen, Kivimäki, Elovainio, & Forma, 2005). In general, past research has addressed retirement both as an individual decision and as a result of global macro changes (Esser, 2005). However, the role of the organizational and social contexts has not been fully explored in this area of research yet. Therefore, the present study aims to address this neglected issue.

### *The Retirement Context in Spain*

All of the working residents in Spain take part in the Spanish National Social Security System. Social Security provides employees with a pension, beginning at age 65 if the employee has contributed to Social Security for at least 15 years (Pedrajas & Sala, 2007). The amount of the pension is calculated by taking into account the base contributions made during the last 15 years before retirement. However, there are also other retirement options. On the one hand, there is a possibility of retiring before the age

of 65 due to incapacity, which leads to different types of disability pensions (Pedrajas & Sala, 2007). On the other hand, a common form of early retirement is also the so-called early retirement due to employment regulation, which refers to collective dismissals for economic, technical, organizational or production reasons. In this case, employees are entitled to receive an indemnification provided by their company, while Social Security itself makes their monthly contributions, so that they can access an unemployment subsidy or just wait until they can access a regular pension. In the case of other types of dismissals, Social Security starts providing pensions to all individuals over 60 years of age who contributed to Social Security for at least 35 years (Pedrajas & Sala, 2007). However, individuals who have contributed to Social Security for 30 to 34 years will be subjected to the pension reduction of 7.5% for each year until they reach the age of 65. Finally, elderly employees can also retire under different retirement plans implemented by the organizations themselves. In this case, employees negotiate their pensions with their organizations, which usually reach the level of between 70 and 85 % of their last salary. The organization also continues to pay for their Social Security until they reach the age of 65. Afterwards, they start receiving their pension from Social Security.

The continuous decrease in the retirement age has led the Spanish government to start implementing different strategies to motivate older workers to work even after 65 years of age, offering certain benefits and incentives for doing so. Thus, according to Social Security, retiring is an individual voluntary decision, suggesting that each older employee can calculate his or her potential pension and, on the basis of this, decides whether or not to retire. Nevertheless, the surveys show that between 60.000 and 70.000 Spanish workers prematurely leave the labor market every year due to different early retirement plans (Spanish Ministry of Labor and Social Affairs, 2006). Thus, it is not so clear whether the retirement decision in Spain is mainly a voluntary individual decision.

In the present study, we suggest that organizations and social groups of co-workers influence older workers' decision to retire by exerting pressures in terms of human resource practices and group norms.

#### *Retirement decision-making process*

Previous research has mainly addressed retirement as a decision making process and proposed that this process is influenced by different *push* and *pull* factors. For instance, health and financial situations have been consistently linked to retirement intentions and behaviors (e.g. Hardy & Quadagno, 1995; Henkens & Tazelaar, 1997; Herzog, House, & Morgan, 1991; Kim & Feldman, 1998; Fronstin, 1999; Karpansalo, Manninen, Kauhanen, Lakka, & Salonen, 2004). That is, previous studies found that the individuals who have sufficient income and poor health are more likely to retire compared to individuals with insufficient and/or unstable incomes and those in good health (Hedge, Borman, & Lammlein, 2006). Furthermore, past research has also suggested that the level of education might influence retirement behaviors and intentions (e.g. Blekesaune & Solem, 2005; Elovainio et al., 2005; Siegrist, Wahrendorf, Von dem Knesebeck, Jürges, Börsch-Supan, 2006). In this way, it has been suggested that individuals with low levels of education tend to retire earlier compared to individuals with higher levels of education, since higher levels of education are related to more attractive occupations and probably better working conditions. Finally, individual level variables, such as leisure orientation, retirement self-efficacy and different job attitudes, have also been shown to impact retirement decisions (e.g. Feldman, 1994; Taylor & Shore, 1995; Crego & Alcover, 2004; Esser, 2005), but their influence appears to be much weaker and less robust than health and wealth factors (Barnes-Farrell, 2003).

However, the retirement decision-making process does not occur in a social vacuum. That is, the decision about whether to retire or not is usually not made only individually, but also on the basis of expectations and influences exerted by the social context, such as organizations and social groups. In the case of organizations, expectations and influences about retirement can be operationalized in terms of human resource practices, and in the case of social groups, in terms of group norms. Although some studies have analyzed the relationships between HR practices and retirement (e.g. Hardy & Hazelrigg, 1999; Saba & Guerin, 2005; Clark & D'Ambrosio, 2005; Hugo, 2005), the impact of such practices on individual retirement intentions and behaviors has not been completely explained yet and, thus, is far from being conclusive. Besides, virtually no studies have explored the role of co-workers as a “significant reference group” in retirement decisions.

In the present study, we suggest role theory as a useful framework in which to address and explore the role of social context in the retirement decision-making process. Specifically, we aim to explore the role of human resource practices and group norms about retirement in the retirement decision, after controlling for individual variables, such as health, income level and level of education. As mentioned previously, these variables have consistently been related to different measures of retirement behaviors and/or intentions (e.g. Henkens & Tazelaar, 1997; Kim & Feldman, 1998; Fronstin, 1999; Karpansalo et al., 2004; Blekesaune & Solem, 2005; Elovainio et al., 2005). Moreover, in the current study we aim to broaden previous research by considering two indicators of retirement intentions, age considering retirement for the first time and early retirement intentions, as well as the actual behavior, specifically, the retirement age. Past research has looked at the retirement behavior and behavioral intentions or prospective behavior, such as preferred retirement age, planned retirement age or

expected retirement age (e.g. Taylor & Shore, 1995; Blakseaune & Solem, 2005; Elovainio et al., 2005). However, fewer studies have focused on both retirement intentions and retirement behaviors. In the remainder of the introduction, we explain the rationale for the study and the proposed hypotheses.

#### *Role theory and retirement process*

Role has been defined as the "standardized patterns of behavior required of all persons playing a part in a given functional relationship, regardless of personal wishes or interpersonal obligations irrelevant to the functional relationship" (Katz & Kahn, 1978, p. 43). Moreover, role theory defines role elaboration as an interaction process in which the focal person negotiates with his/her role set the behaviors and attitudes that must be displayed in the development of his/her role. Role negotiation processes are expected to be more frequent in critical moments of organizational life, such as role transitions (Graen & Scandura, 1987). Due to its impact on personal, social and organizational life, the exit from the workforce might be considered a critical process that can be strongly influenced by these role set components (Teuscher, 2003).

From a role perspective, the process of leaving the work role is considered as a process of mutual disengagement for the role holders and the role set. Role holders have to separate themselves from the role and the context in which the role is embedded. Also, the components of the role set develop a process of withdrawal from the role incumbent. Role exit may be a long and difficult process of negotiation and adjustment, just as role entry is (Teuscher, 2003). However research on role exit in organizations has been less common than research on role entry (Ashforth, 2001). For the purposes of this study, we define retirement as the definitive exit from the workforce. Moreover, we understand retirement as a process of role exit, during which the individuals abandon the role of the employee and start a transition to another role – the role of retiree



(Teuscher, 2003). In this sense, role theory might become a very useful framework within which to explore and facilitate the comprehension of work role exit (George, 1990).

Previous research on role transitions and/or the role exit process has pointed out the existence of a number of sources of behavioral expectations about the role, as well as processes through which these expectations are delivered: system requirements, role schemas and self-concept (Neal & Griffin, 2006), role network validation or invalidation processes (Ebaugh, 1988), prior occupational socialization and motivational orientation, organizational induction-socialization processes and role requirements (Nicholson, 1984). Most of the literature about retirement has not considered the influence of role set expectations on retirement decisions. Some research has analyzed the influence of the interaction with other roles, such as spouses' attitudes (Atchley & Miller, 1983; Henkens, 1999) or work-family conflict (Raymo & Sweeney, 2006) in retirement decisions. Thus, for instance, Henkens (1999) showed the importance of the social support of the spouse as a moderating variable that explains the inconsistencies in the relationship between early retirement intentions and early-retirement. However, the influence of other role set members, such as the group of co-workers, has not been examined. Moreover, the role of organizational requirements regarding role exit has not been fully explored. Studies on this issue have been principally centered on the economic incentives for early retirement (e. g. Kim & Feldman, 1998; Fronstin, 1999), and they have ignored other issues, such as the role of the usual human resource management directed toward older workers or the use of organizational pressures toward retirement.

*Human resource practices and work role withdrawal*

One important way in which organizations transmit role expectations to their employees is through the development of human resource practices. Human resource practices show employees which behaviors are accepted in the organizations and which are not accepted, through rewards, punishments, persuasion, modeling, etc. In the context of work role withdrawal, organizations might stimulate the retention or the withdrawal of older employees by designing different human resource policies and practices (Taylor & Walker, 1997; Greller & Stroh, 2004). In this sense, Yeatts, Folts, and Knapp (2000) distinguished between two different models of human resource management with regard to workers and their aging process: the maintenance model and the depreciation model.

On the one hand, the maintenance model considers workers of any age as valuable *assets* for the organization if they are trained, educated and managed well. It is in the context of this model where organizations develop human resource practices oriented toward the retention, training and development of older workers. Following these conceptualizations, in the present study we propose that performance enhancement practices for older workers are positively related to the age considering retirement for the first time (Hypothesis 1a) and negatively related to early retirement intentions (Hypothesis 1b). Finally we expect that performance enhancement practices are positively related to retirement age (Hypothesis 1c).

On the other hand, the depreciation model is based on the idea that the highest value an individual may have for the organization is at the beginning of his/her career. This value begins to decline in the middle of the individual's career, and depreciation increases until his/her retirement. From this perspective, any investment in older workers is seen as a *cost*, and the organizational policy towards them is focused on promoting their exit (Henkens, 2000; Lin & Hsieh, 2001; Remery, Henkens, Schippers,

& Ekamper, 2003). As can be seen, the depreciation model is based on stereotypes and prejudices toward older workers that are very common in organizations (Forteza & Prieto, 1994). For example, past research has found that older workers are perceived as less efficient and creative, more resistant and less able to change, less interested in training, and more inclined to suffer from illness or accidents. Past research has also found that different age groups develop their own norms regarding the “appropriate” age for retirement, and these norms differ for each occupation. For instance, Joulain and Mullet (2001) found that the older the participant, the higher the minimum “appropriate” age for retirement across various occupations.

Furthermore, to the extent to which older workers start to be considered a less valuable workforce, organizations stop integrating them into the common practices of human resource management, such as selection, training or career development (Hedge et al., 2006). Moreover, sometimes these practices are manifested in the form of pressures or difficulties that obstruct the development of the work role. Thus, following these arguments, in the present study we take into account retirement enhancement practices and organizational pressures toward retirement, and we hypothesize that these two practices are negatively related to age considering retirement for the first time (Hypothesis 2a) and positively related to early retirement intentions (Hypothesis 2b). Moreover, we propose that retirement enhancement practices and organizational pressures toward retirement are negatively related to retirement age (Hypothesis 2c).

#### *Group norms and work role withdrawal*

Groups of co-workers in role sets are an important source of role expectations in organizations (Peiró & Meliá, 2003). According to social identity theory (Turner, 1982), an important component of one’s self-concept is based on membership in social groups and categories. More specifically, this theory argues that individuals categorize and

define themselves as members of distinct social groups, and they develop context specific group norms that are appropriate for the group members. In this way, self-perceptions (“considering him/herself as too old for working”), beliefs and attitudes (“old people are not innovative enough at work”), and behaviors (“old people retire to facilitate younger workers’ career development”) are transformed in terms of the group prototype, where group membership makes people think, feel, behave and define themselves in line with group norms rather than in line with the unique characteristics of the self (Terry & Hogg, 1996). In this sense, in her model about role exit, Ebaugh (1988) has pointed out the importance of groups and role networks as sources of social validation and invalidation, especially in the role exit stage she calls “escalation of doubts”. Overall, these postulations suggest that co-workers, as a significant referent group, are likely to have an impact on work role exit intentions and decisions.

Individuals are likely to seek advice, opinions and support from others who form part of their network when they begin to consider the possibility of retiring. Following this reasoning, we consider that co-workers’ group norms favorable to retirement are related to lower age considering retirement for the first time (Hypothesis 3a), higher early retirement intentions (Hypothesis 3b), and lower retirement age (Hypothesis 3c).

#### *The moderating role of group norms*

In their role transition model, Neal and Griffin (2006) pointed out that the synergy between the three sources of behavioral expectations proposed in their model (system requirements, role schemas and self-concept) will strengthen the occurrence of role behaviors. In the same sense, Ebaugh’s (1989) model suggests that the opinion of the role set members not only influences the individual’s decision about role exit, but it also moderates this process. Thus, the combination of workmates’ opinions favorable to work role exit and organizational policies that stimulate this exit strengthens the

individual decision to exit a work role. Following these arguments, we propose an effect of the interaction between HR practices and group norms on individual work withdrawal behaviors and intentions. More specifically, we expect that the synergy between HR practices and group norms, in terms of their favorableness or unfavorableness toward work role exit, increases subjects' likelihood to exhibit intentions and behaviors consistent with these role expectations (to stay or to exit from their work role). Thus, we expect that the relationships between human resource practices and work role withdrawal indicators are moderated by group norms about retirement, so that when group norms are consistent with human resource practices, the proposed relationships between human resource practices and work role withdrawal behaviors and intentions are fostered (Hypothesis 4).

## Method

### *Sample and Procedure*

Data were obtained through questionnaires on a sample of retirees studying in two university programs for senior people at the University of Valencia and at the Polytechnic University of Valencia, respectively. These are higher education programs designed for people aged 55 or older, and they do not qualify for professional practice. Questionnaires were distributed among the participants by two of the authors, who visited the courses after obtaining approval from the program management to access the classes. Individuals who had retired were asked for their cooperation, guaranteeing confidentiality of the data. The questionnaires were completed in the classroom before the classes started. The final sample was composed of 270 retirees. The composition of the sample was as follows: 32% were females and 68% males; average age was 63.86 years ( $SD = 5.1$ ); 68.8% were married, 9.1% were single, 6.9% were separated or divorced, and 15.2% were widowed. The level of education before retirement was as

follows: 39.8% had a University degree, 51.4% had finished secondary education, 8.4% had basic education, and 0.4% had not studied at all.

With regard to the conditions in which the retirement occurred, the subjects had retired at an average age of 59.66 ( $SD = 4.76$ ), and the mean age considering retirement for the first time was 58.20 ( $SD = 4.60$ ). The average number of years retired was 4.25 ( $SD = 3.74$ ). Sixty-two percent rated their retirement as voluntary and 38% as obligatory. We also asked the subjects if they had engaged in any economic activity in preparation for their retirement, such as having a retirement plan, investing in real estate or in the stock market, etc. Thirty-one percent had not engaged in any kind of economic activity, while 38% had done one economic activity, 16% had performed two economic activities, and 15% had participated in three or more activities. Finally, with regard to the level of pension income, 16.6% earn less than 1.200 euros monthly, 49% earn between 1.200 and 2.000 euros, 25.3% earn between 2.000 and 3.000 euros, and 9.1% earn more than 3.000 euros.

The participants had, at the time of their retirement, an average tenure of 37.9 years ( $SD = 7.43$ ), and the monthly income just before retirement for 8.4% of them was less than 1.200 euros, for 32.2% it was between 1.200 and 2.000, for 38.5% it was between 2.000 and 3.000 euros, and for 20.9% it was more than 3.000 euros. In terms of the positions held in the organizations they worked for, 25.7% held management positions, 32.0% held middle-level positions, 6.2% were supervisors, 17.8% were technical staff, 17.1% were qualified workers, and 1.2% were non-qualified workers. Furthermore, 66.5% of the participants were working in the private sector and 33.5% in the public sector. Moreover, 18.0% had worked in banks, 7.6% in telecommunications, 13.2% in education, 10.4% in healthcare, 8.8% in public administration, 10.0% in

commerce, 9.2% in the car industry, 4.8 % in civil construction and 18% in other sectors.

### *Measures*

#### *Predictor variables*

*Performance enhancement practices* were measured by a 5-item scale asking about the frequency of the use of performance enhancement practices with employees aged 50 years or older in the organizations they worked for. The following five human resource practices were evaluated: “training and education”, “promotion”, “recognition of good work and suggestions for improvement”, “providing opportunities for professional development” and “performance incentives”. Participants replied using a 5-point response scale, ranging from 1 (not at all) to 5 (this was a very common practice). Reliability analysis (Cronbach's alpha) yielded an internal consistency coefficient of .81.

*Retirement enhancement practices* were evaluated with a 3-item scale asking about the frequency of the use of retirement enhancement practices with employees aged 50 years or older in the organizations they worked for (e.g. “retirement plans”, “actions towards the preparation for retirement”, and “economic incentives for taking retirement”). Participants replied using a 5-point response scale, ranging from 1 (not at all) to 5 (this was a very common practice). Reliability analysis (Cronbach's alpha) yielded an internal consistency coefficient of .57.

*Organizational pressures toward retirement* were measured with a 3-item scale (e.g. “I felt forced by my organization to retire early”). Participants evaluated each of the three statements on a 5-point response scale, ranging from 1 (totally disagree) to 5 (totally agree). The internal consistency coefficient (Cronbach's alpha) for this scale was .77.

*Group norms* were assessed by means of 3 items derived and adapted to our study from Terry and Hogg's (1996) group norms scale. The respondents were asked to rate their perceptions of their ex-workmates' norms for taking retirement (e.g. "In general, my co-workers thought that taking retirement was a good thing to do"). The participants responded on a 5-point response scale, ranging from 1 (totally disagree) to 5 (totally agree). The internal consistency coefficient (Cronbach's alpha) for this measure was .79, which is similar to the reliability coefficients for this measure obtained in previous studies (Terry & Hogg, 1996; Terry, Hogg, & White, 1999).

#### *Criterion variables*

*Age considering retirement for the first time.* Subjects were asked to write down the age at which they thought seriously about retirement for the first time.

*Early retirement intentions* were assessed by applying 2 items derived and adapted to our study from the items used by Terry and Hogg (1996) and Terry et al. (1999). Subjects were asked to rate their level of intention to retire early before retirement took place. Specifically, the items were: "I had intentions to retire early" and "I had clearly decided to retire early". Responses were evaluated applying a 5-point response scale, ranging from 1-(certainly not) to 5 (certainly). The internal consistency coefficient (Cronbach's alpha) was .95.

*Retirement age.* Subjects were asked to indicate how old they were when they retired.

#### *Control variables*

*Health status* was measured by applying a single item measure ("My health impaired or even impeded me from going on with my work") indicating participants' perceptions about how health had impaired or impeded their continuity at work.



Subjects replied using a 5-point response scale, ranging from 1 (totally disagree) to 5 (totally agree).

*Level of income after retirement* was measured by 4 categories. Subjects were asked to rate their level of monthly income after retirement from among the following 4 alternatives: 1. less than 1.200 euros; 2. between 1.200 and 2.000 euros; 3. between 2.000 and 3.000 euros; and 4. more than 3.000 euros.

*Level of education* was measured by the following categories: 1. no studies at all; 2. basic education; 3. secondary education; and 4. university degree. We asked the participants to indicate a category that corresponds to their level of education.

### *Analyses*

First, we carried out means, standard deviations, and reliability and correlation analyses to get some insight into the relationships between the considered variables. Second, we tested our hypotheses by applying separate moderated hierarchical regression analyses for each dependent variable. In step 1, the control variables were entered. In step 2, the three types of human resource practices were introduced. In step 3, we included group norms. Finally, in the fourth step, we entered the three interaction terms (Cohen & Cohen, 2003): group norms X performance enhancement practices, group norms X retirement enhancement practices, and group norms X organizational pressures toward retirement. Afterwards, we plotted the significant moderating effects, in order to clarify the direction of the interactive effects, and we conducted slope analysis as an additional step in the moderator analysis (Jaccard, Turrissi, & Wan, 1990; Cohen & Cohen, 2003). To avoid limitations associated with multicollineality, all the variables were standardized (Sivasubramaniam, Murry, Avolio, & Jung, 2002).

## **Results**

### *Descriptive results*

Descriptive results for each item of the studied variables are shown in Table 1. Among the performance enhancement practices, promotion was rated as the least frequent practice, whereas training and education scored the highest on this scale. Among the retirement enhancement practices, actions towards the preparation for retirement scored the lowest, whereas retirement plans seemed to be the most frequently used practice. However, it is worth noting that in both cases the most frequent practices scored below the scale mean of 2.5. In contrast, three items of organizational pressures were almost equally evaluated, in all cases just above the scale mean.

---

PLEASE, INSERT TABLE 1 ABOUT HERE

---

In Table 2 we present descriptive results for the studied variables. The correlations among the three types of human resource practices show an interesting pattern. Our results showed that retirement enhancement practices and performance enhancement practices are highly positively correlated. This result might indicate that those organizations that were promoting early retirement continued to implement performance enhancement practices at the same time, most likely while older employees remained in the organizations. However, organizations that enhance retirement prefer to have older workers retire and, thus, tend to put pressures on them to do so (a positive correlation was found between retirement enhancement practices and organizational pressures, although only marginally significant). It is also interesting to note the correlations between the three outcomes. Our results show that the sooner the participants started to consider retirement for the first time, the higher their intentions were to retire. Moreover, the sooner the participants considered retirement for the first time, the sooner they actually retired. With regard to correlations between human

resource practices and the studied outcomes, we found performance enhancement practices to be positively correlated with early retirement intentions. Furthermore, retirement enhancement practices were negatively related to age considering retirement for the first time and to retirement age, and they were positively related to early retirement intentions. Finally, organizational pressures toward retirement were negatively related to all the studied outcomes. With regard to the group norms about retirement, our results showed negative relationships between group norms and age considering retirement for the first time and with retirement age, respectively. Finally, group norms were positively related to early retirement intentions.

---

PLEASE, INSERT TABLE 2 ABOUT HERE

---

To test our hypotheses, we next turned to the results of the hierarchical regression analyses, shown in Tables 3, 4 and 5, separately for each outcome under consideration.

### *Hypotheses testing*

#### Age considering retirement for the first time

As can be seen from Table 3, level of education positively predicted age considering retirement for the first time ( $\beta = .19$ ;  $p < .05$ ). Moreover, our results showed that performance enhancement practices did not predict age considering retirement for the first time; thus, our hypothesis 1a was not supported. In contrast, we found that the higher the level of retirement enhancement practices ( $\beta = -.17$ ;  $p < .1$ ) and the stronger the organizational pressures toward retirement ( $\beta = -.20$ ;  $p < .01$ ), the lower the age when retirement was considered for the first time. However, the relationship with retirement enhancement practices was only marginally significant, and, thus, our

hypothesis 2a was only partially confirmed. Furthermore, group norms about retirement were also found to be a marginally significant predictor of age considering retirement for the first time ( $\beta = -.14$ ;  $p < .1$ ), providing some support for our hypothesis 3a. Finally, to test our moderator hypothesis 4, we introduced interaction terms between HR practices and group norms about retirement in the last step. Our results revealed a significant interaction effect for group norms and retirement enhancement practices ( $\beta = .18$ ;  $p < .1$ ), which accounted for a significant proportion of the explained variance. We plotted the interaction effect in Figure 1. As can be observed, contrary to our hypothesis, group norms more favorable toward early retirement did not strengthen the negative relationship between retirement enhancement practices and age considering retirement for the first time. In fact, for subjects who perceived group norms as favorable towards retirement, there was no relationship between retirement enhancement practices and age considering retirement for the first time ( $t(260) = -.07$ ). On the contrary, this relationship was enhanced for subjects who perceived group norms to be less favorable to retirement, so that higher levels of retirement enhancement practices predicted lower age considering retirement for the first time ( $t(260) = -8.23$ ;  $p < .01$ ). Thus, group norms had a very strong effect on age considering retirement for the first time when they were found to be less favorable toward retirement.

---

PLEASE, INSERT TABLE 3 ABOUT HERE

---



---

PLEASE, INSERT FIGURE 1 ABOUT HERE

---

#### Early retirement intentions

The control variables introduced in the first step of the hierarchical regression analysis accounted for a significant proportion of the explained variance in early retirement intentions (see Table 4). Our results showed retirement income to positively predict early retirement intentions ( $\beta=.26, p<.01$ ). After controlling for health status, income level and level of education, two out of the three types of human resource practices were related to early retirement intentions. First, performance enhancement practices did not predict early retirement intentions; thus, hypothesis 1b was not supported. Second, retirement enhancement practices positively ( $\beta = .25; p < .01$ ) and organizational pressures toward retirement negatively ( $\beta = -.28; p < .01$ ) predicted early retirement intentions. These results only partially confirm our hypothesis 2b, because organizational pressures toward retirement predicted early retirement intentions in the opposite way to what was expected. Third, in line with hypothesis 3b, our results revealed a significant positive relationship between group norms and early retirement intentions ( $\beta = .39; p < .01$ ). In fact, when entering group norms in the third step, the significance of the regression coefficient for the retirement enhancement practices decreased.

---

PLEASE, INSERT TABLE 4 ABOUT HERE

---

Finally, the introduction of the interaction terms between HR practices and group norms did not account for an additional proportion of the explained variance in early retirement intentions. Besides, none of the interaction terms was significant, and, therefore, we did not confirm our moderation hypothesis in the case of early retirement intentions. In fact, rather than a moderating role of group norms in the relationship between retirement enhancement practices and early retirement intentions, the results of

the hierarchical regression analysis implied a mediating role of group norms in this relationship. In order to explore this possible mediation, we tested a structural equation model. For this purpose, we submitted covariance and asymptotic covariance matrixes to analyze the hypothesized model, and we selected a maximum likelihood method of estimation as implemented by LISREL 8.3 (Jöreskog & Sörbom, 1999). Due to the limited sample size, at both levels of analysis our model was tested with manifest variables. First, we submitted a fully mediated model, including a path from retirement enhancement practices to group norms and a path from group norms to early retirement intentions. Except for CFI, all the fit indices yielded an inadequate fit with the following values:  $\chi^2(1) = 6.67$ ;  $p = 0.01$ ; RMSEA = 0.17; NNFI = 0.74; CFI = 0.91; SRMR = 0.07. Thus, in the next step we fitted a partially mediated model to the data, which is presented in Figure 2. Compared to the fully mediated model, a partially mediated model showed a perfect fit ( $\chi^2 = 0.0$ ;  $p = 1$ ; RMSEA = 0.0). Overall, these results indicate that retirement enhancement practices affected retirement intentions in a direct way and in an indirect way through group norms about retirement.

---

PLEASE, INSERT FIGURE 2 ABOUT HERE

---

### Retirement age

As can be seen from Table 5, level of education was positively related to retirement age ( $\beta = .18$ ;  $p < .05$ ). In contrast, health status ( $\beta = -.13$ ;  $p < .1$ ) and income level ( $\beta = -.13$ ;  $p < .1$ ) showed a tendency to negatively predict retirement age. Together, these control variables accounted for a significant proportion of the variance in retirement age. Moreover, our results showed that performance enhancement practices did not predict retirement age. Therefore, our hypothesis 1c was not

confirmed. However, we found that both retirement enhancement practices ( $\beta = -.14$ ;  $p < .1$ ) and organizational pressures toward retirement ( $\beta = -.28$ ;  $p < .01$ ) negatively predicted retirement age. Similarly to the results on age considering retirement for the first time, hypothesis 2c was only partially confirmed, since retirement enhancement practices only showed a tendency to predict retirement age. Moreover, group norms about retirement negatively predicted retirement age; however, the regression coefficient in this case was also only marginally significant ( $\beta = -.13$ ,  $p < .1$ ).

---

PLEASE, INSERT TABLE 5 ABOUT HERE

---

Finally, in line with moderation hypothesis 4, we found that group norms moderated the relationship between retirement enhancement practices and retirement age ( $\beta = .21$ ;  $p < .05$ ). This interaction effect is graphically presented in Figure 3. As can be seen from the plot, low retirement enhancement practices predicted higher retirement age in subjects who perceived less favorable group norms toward retirement compared to those subjects who reported more favorable group norms toward retirement. Nevertheless, the retirement age was shown to decrease to the extent to which retirement enhancement practices increased, but only for the subjects who perceived low group norms regarding retirement ( $t(260) = -9.25$ ;  $p < .01$ ). On the contrary, the slope was not significant for the subjects who perceived high group norms about retirement ( $t(260) = .58$ ).

---

PLEASE, INSERT FIGURE 3 ABOUT HERE

---

## Discussion

In the present study we consider retirement as a work role withdrawal process in which organizational and group context influence the role incumbent's behavior through his/her expectations about work role exit. In this way, the present study contributes to the understanding of the retirement process in different ways. First, in order to better appraise the role of organizational expectations in the retirement process, three types of human resource practices were assessed: practices oriented towards the retention of older employees in the organizations (performance enhancement practices), practices oriented toward facilitating retirement (retirement enhancement practices), and practices that push subjects toward retirement (organizational pressures toward retirement). Second, the role of group expectations was examined through co-workers' group norms about retirement. Third, we analyzed the role of the synergy between human resource practices and group norms in the retirement process; in other words, we suggested interactive effects between human resource practices and group norms on retirement intentions and behaviors. Moreover, in order to broaden the exploration and understanding of the retirement process, subjective and behavioral components of the retirement process were analyzed, such as age considering retirement for the first time, early retirement intentions and retirement age. In the remainder of this section, we outline the main results of the study and discuss some of its limitations and recommendations for future research.

One of our main findings refers to the influence of organizations' human resource practices and group norms on the work role withdrawal process, even when health status, level of education and economic status are controlled for. In this sense, our results extend previous research that has focused mainly on individual or interpersonal influences on the retirement process (e.g. Feldman, 1994; Taylor & Shore, 1995; Henkens, 1999; Henkens, 2000; Crego & Alcover, 2004; Esser, 2005). With



regard to the expectations of the organizations, our results showed a different pattern of relationships between the studied human resource practices and each type of work withdrawal behavior and/or intention. First, performance enhancement practices did not reduce any of the work role withdrawal indicators studied in the present research. It is possible that, since these practices are oriented toward performance enhancement, they could be interpreted by older workers more as a stressor than as a facilitator of older worker integration (Hansez, Bertrand, De Keyser, & Pérée, 2005). Moreover, in the context of the depreciation model (high organizational pressures toward retirement), performance enhancement practices could lose their influence on older workers' retention. Further research should analyze this issue in more detail. In the same sense, differentiation between regular human resource practices and practices especially oriented toward older employees could help to understand their function as a source of expectations for older workers to remain in the organizations. Second, in line with our assumptions, retirement enhancement practices were strongly and positively related to early retirement intentions and marginally negatively related to age considering retirement for the first time and retirement age. Third, organizational pressures toward retirement were significantly related to all studied work role withdrawal indicators. Thus, with regard to human resource practices, the situation encountered in our sample suggests a cultural model of depreciation rather than the one of maintenance (Yeatts *et al.*, 2000). These results are coherent with previous research on organizational values, beliefs and practices with older workers that has pointed out the lack of human resource practices oriented toward retaining workers over 50 years of age and the use of discriminatory practices toward them, such as limited responsibilities, negative performance appraisal, stimulation of early retirement, limited access to training and career development, avoidance of hiring and promoting older workers, etc. (Hedge et

al., 2006). These practices situate subjects in a position that, following Turner (1969), could be conceptualized as *liminal*, a situation in which workers feel neither outside nor inside their organizational role. The lack of integration of older workers in the regular human resource practices and, at the same time, the orientation of human resource practices toward their exit, might leave subjects without a solid base for organizational interaction and with a feeling of *rolelessness* (Ashforth, 2001). This situation might heavily reduce the reasons to remain in the organization (Teuscher, 2003). In fact, our results indicate that the participants in this sample on average left the workforce five years before the established official retirement age (65 years) according to the Spanish law.

However, we found some results that contradict our hypotheses regarding the relationships between human resource practices and the studied outcomes. For instance, contrary to our expectations we found a negative relationship between organizational pressures and early retirement intentions. Two different alternative explanations could account for this result. First, it has to be considered that we used a subjective measure of organizational pressures, which refers to individual feelings of being forced to retire instead of actual pressures exerted by the organizations to stimulate retirement. Previous research has found similar results regarding the relationship between intentions to continue working and perceptions of forced retirement. More concretely, Van Solinge and Henkens (2007) found that among the individuals who had strong intentions to continue working perceptions of involuntary retirement prevailed. These results, together with the operationalization of organizational pressures in our study, might imply that the relationship between organizational pressures and early retirement intentions could be in the opposite direction, so that the less intentions individuals show to retire, the stronger the feelings of organizational pressures toward retirement. Perhaps

future research could operationalize organizational pressures more as a context variable and employ longitudinal designs to clarify these unexpected results. Second, other alternative explanation could be related to the fact that individuals generally are highly motivated to make decisions and have control over their own lives (Brehm, 1966). In this sense, the lower level of intentions to retire early in subjects who perceive higher levels of organizational pressures could be interpreted as a reactance toward these pressures. Reactance has been defined as an action against rules, regulations or pressures from outside the individual that threaten or eliminate behavioral freedom (Brehm, 1966; Brehm & Brehm, 1981).

Group expectations about work role exit were shown to play an important role in the retirement process, according to the social identity and self-categorization theories (Turner, 1982) and role exit models (Ebaugh, 1988). After controlling for the impact of human resource practices, group norms explained a significant proportion of the variance in the work role withdrawal behavior and intentions, although the strongest relationship was found with early retirement intentions. These results show how ex-workmates exerted influence on work role exit. Overall, these findings support the importance of the reference group in the role elaboration process (Graen & Scandura, 1987), specifically in the process of work role exit. These findings, together with the results about the negative relationship between organizational pressures and early retirement intentions, suggest that older workers' intentions are directly and positively related to their co-workers' opinions about work role exit, whereas the perception of organizational pressures may produce reactance towards organizational expectations.

With regard to the moderating hypothesis, support was found for group norms as moderating the relationships between retirement enhancement practices and age considering retirement for the first time, and retirement enhancement practices and

retirement age. However, the results were not totally in the expected direction. According to the role models (Ebaugh, 1988; Neal & Griffin, 2006), we expected those individuals experiencing synergy between human resource practices and group norms to enhance their responses by either remaining in or exiting the work role. Results showed that the relationships between retirement enhancement practices and age considering retirement for the first time, and also with retirement age, strengthened when group norms were not favorable toward retirement. Thus, in the case of subjects who perceived the group norms as favorable toward retirement, retirement enhancement practices did not play an important role in either the age considering retirement for the first time or in the retirement age. These results point out the key role of workmates' norms about retirement. Namely, they suggest that the decrease in retirement enhancement practices in the companies does not prevent people from leaving their work role or thinking about it, if the group norms about taking retirement do not change at the same time. Furthermore, group norms were not shown to moderate any relationship between performance enhancement practices and the studied outcomes nor did they moderate any relationship between organizational pressures and the studied outcomes. There were also no moderating effects of group norms in the relationships between human resource practices and early retirement intentions. Instead of moderating effects, support was found for group norms partially mediating the relationship between retirement enhancement practices and early retirement intentions. The existence of retirement enhancement practices was shown to enhance the development of group norms favorable to retiring, which in turn impacts individual early retirement intentions.

Finally, previously we pointed out the dynamic nature of retirement, suggesting a sequential process, in which we took into account age considering retirement for the

first time and retirement intentions and behavior. The age considering retirement for the first time correlates negatively with retirement intentions, but shows a positive correlation with retirement age. These findings underline a number of interesting issues for further research. For instance, future studies could analyze the role of the intentions between the initial consideration of retirement and the actual retirement behavior, controlling for factors such as the individual chronological age when this process starts.

Although we revealed some important influences of organizational and group level variables on retirement intentions and behaviors that were not addressed in previous research, the present study presents some limitations. First, the research design was a cross-sectional one, in which data were collected from a retrospective point of view, similar to the designs employed in some previous studies about retirement (e.g. Shultz, Morton, & Weckerle, 1998; Davis, 2003). Such retrospective responses are susceptible to cognitive consistency bias, such as recall bias, and, thus, have to be interpreted with caution. This is especially important as in the present study we measured opinions, norms and intentions, which might be particularly susceptible to this type of biases. Nevertheless, Beehr and Nielson (1995), in their longitudinal study, report high correlations between retirees' retrospective reports and their prior reports, which provides some support for the validity of these responses. Future research should employ longitudinal designs to examine the propositions of this study, following older workers from employment to retirement. A second limitation concerns the quite limited sample size, which might have accounted for the low statistical power, especially when testing for interactions. Another limitation could be the selectivity of the sample, given that the data was collected from individuals participating in two university programs for older people. This fact might be related to certain pre-retirement attitudes that could influence some of the outcomes studied. Nevertheless, we used a heterogeneous sample

in terms of occupation, age, gender, work status, etc. Future studies should employ random samples in order to avoid this limitation. Moreover, we also have to take into consideration a possible overestimation of the effects, since we did not include certain variables, such as job and occupational characteristics, in the model. Nevertheless, our variables explained 20 % of the variance in the age considering retirement for the first time and the retirement age, and 34 % of the variance in early retirement intentions. Finally, although the present study sheds some light on how human resource practices influence work role withdrawal behaviors and intentions, it does not contribute to the understanding about which human resource practices make people stay at work. Performance enhancement practices were not shown to decrease work role withdrawal behaviors or intentions. Further research should address this issue.

The current findings have some important practical implications. First of all, they highlight the need to attend to group and organizational level variables in order to understand and/or prevent early retirement. More specifically, human resource practices oriented toward retirement have been found to influence the withdrawal process, but they are not enough to understand this process completely. Other contextual variables, such as group norms, were shown to exert an important influence in this process. Thus, organizational interventions should keep both factors in mind in attempting to prevent work role withdrawal. Moreover, according to the findings of our study, interventions designed to increase the retention of older workers should consider not only what makes people stay in their work role, but also what makes people want to stay in their work role and how human resource policies about elderly workers can be modified. The consideration of different indicators of work role withdrawal in the present study sheds some light on these different kinds of behaviors and intentions. Our findings showed

that human resource practices and group norms exert different influences on the withdrawal behaviors and intentions considered.

Along these lines, despite its limitations, our research makes a meaningful contribution to the understanding of the role of group and organizational contexts in work role withdrawal. Specifically, we showed that human resource practices and group norms exert an important influence on this process, and we demonstrated the existence of interactions between different sources of role expectations.

### References

- Ashforth, B. E. (2001). *Role transitions in organizational life: An identity based perspective*. New Jersey: Erlbaum.
- Atchley, R. C., & Miller, S. L. (1983). Types of elderly couples. In T. Brubaker (Ed.), *Family relationships in older life* (pp. 77-90). Beverly Hills: Sage.
- Barnes-Farrell, J. L. (2003). Beyond health and wealth: Attitudinal and other influences on retirement decision-making. In G. A. Adams & T. A. Beehr (Eds.), *Retirement: Reasons, processes, and results* (pp. 159-187). New York: Springer Publishing.
- Beehr, T. A., & Nielson, N. L. (1995). Descriptions of job characteristics and retirement activities during the transition to retirement. *Journal of Organizational Behavior*, 16, 681–690.
- Blekesaune, M., & Solem, P. E. (2005). Working conditions and early retirement. A prospective study of retirement behavior. *Research on Aging*, 27, 3-30.
- Brehm, J. W. (1966). *A theory of psychological reactance*. New York: Academic Press.
- Brehm, S. S., & Brehm, J. W. (1981). *Psychological reactance: A theory of freedom and control*. New York: Academic Press.

- Clark, R. L., & D'Ambrosio, M. B. (2005). Recruitment, retention, and retirement: Compensation and employment policies for higher education. *Educational Gerontology*, 31(5), 385-403.
- Cohen, J., & Cohen, P. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Crego, A., & Alcover, C. M. (2004). La experiencia de prejubilación como fenómeno psicosocial: estado de la cuestión y propuesta de un marco teórico para la investigación [Early retirement experience as a social-psychological phenomena: state of the art and a theoretical proposal for research]. *Revista de Psicología del Trabajo y de las Organizaciones*, 20(3), 291-336.
- Davis, M. A. (2003). Factors related to bridge employment participation among private sector early retirees. *Journal of Vocational Behavior*, 63, 55-71.
- Ebaugh, H. R. F. (1988). *Becoming an ex: The process of role exit*. Chicago: University of Chicago Press.
- Elovainio, M., Forma, P., Kivimäki, M., Sinervo, T., Sutinen, R., & Laine, M. (2005). Job demands and job control as correlates of early retirement thought in Finnish social and health care employees. *Work & Stress*, 19(1), 84-92.
- Esser, I. (2005). *Continued work or retirement? Preferred exit age in Western European countries*. Stockholm: Institutet för Framtidsstudier. Retrieved July 15, 2006, from [http://ideas.repec.org/p/hhs/ifswps/2005\\_009.html](http://ideas.repec.org/p/hhs/ifswps/2005_009.html).
- Eurostat. (2006). *Population and social conditions*. Retrieved November 20, 2007, from <http://europa.eu.int/comm/eurostat/>.
- Feldman, D. (1994). The decision to retire early: a review and conceptualization. *Academy of Management Review*, 19(2), 285-311.



- Forteza, J. A., & Prieto, J. M. (1994). Aging and work behavior. In H. C. Triandis, M. D. Dunette, & L. M. Hough (Eds.), *Handbook of Industrial and Organizational Psychology*, 2<sup>nd</sup> ed. (Vol. 4, pp. 447-483). Palo Alto, CA: Consulting Psychologists Press, Inc.
- Fronstin, P. (1999). Retirement patterns and employee benefits: Do benefits matter? *The Gerontologist*, 39, 37-47.
- George, L. K. (1990). Social structure, social processes, and social psychological states. In R. H. Binstock & L. K. George (Eds.), *Handbook of aging and the social sciences* (pp. 205–226). San Diego: Academic Press.
- Graen, G. B., & Scandura, T. (1987). Toward a psychology of dyadic organizing. *Research in Organizational Behavior*, 9, 175-208.
- Greller, M. M., & Stroh, L. K. (2004). Making the most of “late-career“ for employers and workers themselves: Becoming elders not relics. *Organizational Dynamics*, 33(2), 202-214.
- Hansez, I., Bertrand, F., De Keyser, V., & Pérée, F. (2005). Fin de carrière des enseignants: Vers une explication du stress et des retraites prématurées [Career end for teachers: Towards a better understanding of stress and early retirement]. *Travail Humain*, 68(3), 193-223.
- Hardy, M. A., & Quadagno, J. (1995). Satisfaction with early retirement: Making choices in the auto industry. *Journals of Gerontology: Social Sciences*, 50B, S217-226.
- Hardy, M. A., & Hazelrigg, L. (1999). A multilevel model of early retirement decisions among autoworkers in plants with different features. *Research on Aging*, 21, 275-303.

- Hedge, J. W., Borman, W. C., & Lammlein, S. E. (2006). *The aging workforce. Realities, myths, and implications for organizations*. Washington: American Psychological Association.
- Henkens, K. & Tazelaar, F. (1997). Explaining retirement decisions of civil servants in the Netherlands. *Research on Aging*, 19, 139-173.
- Henkens, K. (1999). Retirement intentions and spousal support: A multi-actor approach. *Journal of Gerontology: Social Sciences*, 54B(2), 63-73.
- Henkens, K. (2000). Supervisors' attitudes about early retirement of subordinates. *Journal of Applied Social Psychology*, 30(4), 833-852.
- Herzog, A. R., House, J. S., & Morgan, J. N. (1991). Relation of work and retirement to health and well-being in older age. *Psychology and Aging*, 6, 202-211.
- Hugo, G. (2005). Demographic trends in Australia's academic workforce. *Journal of Higher Educational Policy and Management*, 27(3), 327-343.
- Jaccard, J., Turrisi, R., & Wan, C. K. (1990). *Interaction effects in multiple regression*. Newsbury Park, CA: Sage.
- Joulain, M., & Mullet, E. (2001). Estimating the 'appropriate' age for retirement as a function of perceived occupational characteristics. *Work & Stress*, 15, 357-365.
- Jöreskog K. G., & Sörbom, D. (1999). *LISREL 8.3 User's Reference Guide*. Chicago: Scientific Software Inc.
- Karpansalo M., Manninen P., Kauhanen J., Lakka T. A., & Salonen J. T. (2004). Perceived health as a predictor of early retirement. *Scandinavian Journal of Work Environment and Health*, 30(4), 287-292.
- Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations*. New York: Wiley.

- Kim, S., & Feldman, D. C. (1998). Healthy, wealthy, or wise: Predicting actual acceptances of early retirement incentives at three points in time. *Personnel Psychology*, 51(3), 623-642.
- Lin, T. C., & Hsieh, A. T. (2001). Impact of job stress on early retirement intention. *International Journal of Stress Management*, 8(3), 243-247.
- Maurer, T. J., Wrenn, K. A., & Weiss, E. M. (2003). Toward Understanding and Managing Stereotypical Beliefs about Older Worker's Ability and Desire for Learning and Development. In G. K. Ferris & K. M. Rowland (Eds.), *Research in Personnel and Human Resources Management* (Vol. 22, pp. 253-285). Greenwich, CT: JAI.
- Neal, M. & Griffin, M. A. (2006). A model of self-held work roles and role transitions. *Human Performance*, 19, 23-41.
- Nicholson, N. (1984). A theory of work role transitions. *Administrative Science Quarterly*, 29, 172-191.
- Pedrajas, A., & Sala, T. (2006). Reforma de la seguridad social. Aspectos basicos del "acuerdo sobre medidas en materia de seguridad social" alcanzado entre los interlocutores sociales y el gobierno el 13 de julio de 2005 [Social Security reform. Basic aspects about "agreement regarding social security measures" reached between social partners and the government on the 13th of July 2005]. *FREMAP Magazine*, 31
- Peiró, J. M., & Meliá, J. L. (2003). Formal and Informal Interpersonal Power in Organisations: Testing a Bifactorial Model of Power in Role-set. *Applied Psychology: An International Review*, 52, 14-35.
- Raymo, J. M., & Sweeney, M. M. (2006). Work-Family Conflict and Retirement Preferences. *The Journals of Gerontology*, 61B(3), 161-169.

- Remery, C., Henkens, K., Schippers, J., & Ekamper, P. (2003). Managing an aging workforce and a tight labor market: views held by Dutch employers. *Population Research and Policy Review*, 22, 21-40.
- Saba, T., & Guerin, G. (2005). Extending employment beyond retirement age: the case of health care managers in Quebec. *Public Personnel Management*, 34(2), 195-214.
- Shultz, K., Morton, K. R., & Weckerle, J. R. (1998). The influence of push and pull factors on voluntary and involuntary early retirees' retirement decision and adjustment. *Journal of Vocational Behavior*, 53, 45-57.
- Siegrist, J., Wahrendorf, M., Von dem Knesebeck, O., Jürges, H., & Börsch-Supan, A. (2006). Quality of work, well-being, and intended early retirement of older employees – baseline results from the SHARE study. *European Journal of Public Health*, 17(1), 62-68.
- Sivasubramaniam, N. S., Murry, W. D., Avolio, B. J., & Jung, D. I. (2002). A longitudinal model of the effects of team leadership and group potency on group performance. *Group and Organizational Management*, 27, 66–96.
- Spanish Ministry of Labor and Social Affairs. (2006). *Boletín de noticias [Newsletter]*, 63. Retrieved April 24, 2006, from [http://www.mtas.es/itss/sala\\_de\\_comunicaciones/boletin/Boletin\\_n63.pdf](http://www.mtas.es/itss/sala_de_comunicaciones/boletin/Boletin_n63.pdf).
- Sutinen, R., Kivimäki, M., Elovainio, M., & Forma, P. (2005). Associations between stress at work and attitudes towards retirement in hospital physicians. *Work & Stress*, 19(2), 177-185.
- Taylor, M. A., & Shore, L. (1995). Predictors of Planned Retirement Age: An Application of Beehr's Model. *Journal of Applied Psychology*, 10(1), 76-83.
- Taylor, P., & Walker, A. (1997). Age discrimination and public policy. *Personnel Review*, 26(4), 307–318.

- Terry, D. J., & Hogg, M. A. (1996). Group norms and the attitude-behavior relationship: a role for group identification. *Personality and Social Psychology Bulletin*, 22(8) 776-793.
- Terry, D. J., Hogg, M. A., & White, K. M. (1999). The theory of planned behaviour: Self-identity, social identity and group norms. *British Journal of Social Psychology*, 38, 225-244.
- Teuscher, U. (2003). *Transition to retirement and aging. Change and persistence of personal identities*. Unpublished Doctoral Dissertation, University of Fribourg, Switzerland.
- Turner, V. W. (1969). *The ritual process: Structure and anti-structure*. Chicago: Aldine.
- Turner, J. C. (1982). Towards a cognitive redefinition of the social group. In H. Tajfel (Ed.), *Social identity and intergroup relations* (pp. 15-40). Cambridge, UK: Cambridge University Press.
- United Nations (2007). *World population prospects. The 2006 revision*. Retrieved January 10, 2008, from <http://www.un.org/esa/population/publications/wpp2006/wpp>.
- Van Solinge, H., & Henkens, K. (2007). Involuntary retirement: The role of restrictive circumstances, timing, and social embeddedness. *Journal of Gerontology: Social Sciences*, 62B, S295-S303.
- Yeatts, D. L., Folts, W. E., & Knapp, J. (2000). Older workers' adaptation to a changing workplace: Employment issues for the 21<sup>st</sup> century. *Educational Gerontology*, 26, 566-582.
- Waldman, D. A., & Avolio, B. J. (1993). Aging and work performance in perspective: Contextual and developmental considerations. In G. K. Ferris & K. M. Rowland

(Eds.), *Research in personnel and human resources management* (Vol. 11, pp. 133-162). Greenwich, CT: JAI.

Table 1. *Descriptive statistics for each item of the studied variables*

	<i>M</i>	<i>SD</i>	<i>Range</i>
<i>Performance enhancement practices</i>			
training and education	2.41	1.49	1-5
promotion	1.79	1.09	1-5
recognition of work and ideas	2.15	1.28	1-5
opportunities for professional development	2.23	1.27	1-5
performance incentives	2.15	1.42	1-5
<i>Retirement enhancement practices</i>			
retirement plans	2.44	1.54	1-5
actions towards the preparation for retirement	1.29	.80	1-5
economic incentives for taking retirement	2.24	1.50	1-5
<i>Organizational pressures toward retirement</i>			
I felt forced by my organization to retire early	2.76	1.63	1-5
I couldn't do much to continue working	2.53	1.72	1-5
Rejecting the retirement offer would put me in a difficult situation in the organization	2.82	1.71	1-5
<i>Group norms</i>			
In general, my co-workers thought that taking retirement was a good thing to do	3.63	1.24	1-5
In general, my co-workers wanted to retire	3.53	1.31	1-5
In general, my co-workers thought that it was good for me to retire	3.09	1.40	1-5

Table 2. Descriptive statistics, Pearson correlations and Cronbach's  $\alpha$ - coefficients for the studied variables

	$\alpha$	$M$	$SD$	1	2	3	4	5	6	7	8	9
1. Health status		1.95	1.50									
2. Level of income		2.27	.85	-.13+								
3. Level of education		3.31	.64	-.06	.26**							
4. Performance enhancement practices	.81	2.21	1.06	.04	.29**	.09						
5. Retirement enhancement practices	.57	2.03	1.06	-.18*	.25**	-.05	.40**					
6. Org. pressures toward retirement	.77	2.69	1.41	-.06	.12+	-.03	.03	.13+				
7. Group norms	.79	3.42	1.12	.03	.28**	-.01	.17*	.24**	-.04			
8. Age considering retirement for the first time		58.20	4.60	-.06	-.18*	.12+	-.06	-.20**	-.25**	-.21**		
9. Early retirement intentions	.95	2.64	1.56	.04	.17*	-.06	.15*	.28**	-.17*	.50**	-.36**	
10. Retirement age		59.66	4.76	-.13*	-.16*	.13*	-.02	-.16*	-.32**	-.17*	.81**	-.09

Notes: \*  $p < .05$ ; \*\*  $p < .01$ ; + $p < .1$



Table 3. Hierarchical regression analysis of age considering retirement for the first time on human resources practices and group norms.

Variable	$\beta$	$R^2$	$\Delta R^2$
Step 1		.05+	
Health status	-.06		
Income level	-.13		
Level of education	.19*		
Step 2		.13**	.08**
Performance enhancement practices	-.03		
Retirement enhancement practices	-.17+		
Org. pressures toward retirement	-.20*		
Step 3		.15**	.02+
Group norms	-.14+		
Step 4		.20**	.05*
Norms*Performance enhancement	.14		
Norms*Retirement enhancement	.18+		
Norms*Org. pressures	-.06		

Notes: \*  $p < .05$ ; \*\*  $p < .01$ ; + $p < .1$

Table 4. Hierarchical regression analysis of early retirement intentions on human resources practices and group norms

Variables	$\beta$	$R^2$	$\Delta R^2$
Step 1		.06*	
Health status	.04		
Income level	.26**		
Level of education	-.09		
Step 2		.19**	.13**
Performance enhancement practices	.10		
Retirement enhancement practices	.25**		
Org. pressures toward retirement	-.28**		
Step 3		.32**	.14**
Group norms	.39**		
Step 4		.34**	.02
Norms*Performance enhancement	-.11		
Norms*Retirement enhancement	.10		
Norms*Org. pressures	-.06		

Notes: \*  $p < .05$ ; \*\*  $p < .01$ ; + $p < .1$

Table 5. Hierarchical regression analysis of retirement age on human resources practices and group norms

Variable	$\beta$	$R^2$	$\Delta R^2$
Step 1		.05*	
Health status	-.13+		
Income level	-.13+		
Level of education	.18*		
Step 2		.16**	.11**
Performance enhancement practices	.06		
Retirement enhancement practices	-.14+		
Org. pressures toward retirement	-.28**		
Step 3		.17**	.01+
Group norms	-.13+		
Step 4		.20**	.03
Norms*Performance enhancement	-.07		
Norms*Retirement enhancement	.21*		
Norms*Org. pressures	.02		

Notes: \*  $p < .05$ ; \*\*  $p < .01$ ; + $p < .1$

Figure 1. Moderator effects of group norms on the relationship between retirement enhancement practices and age considering retirement for the first time.

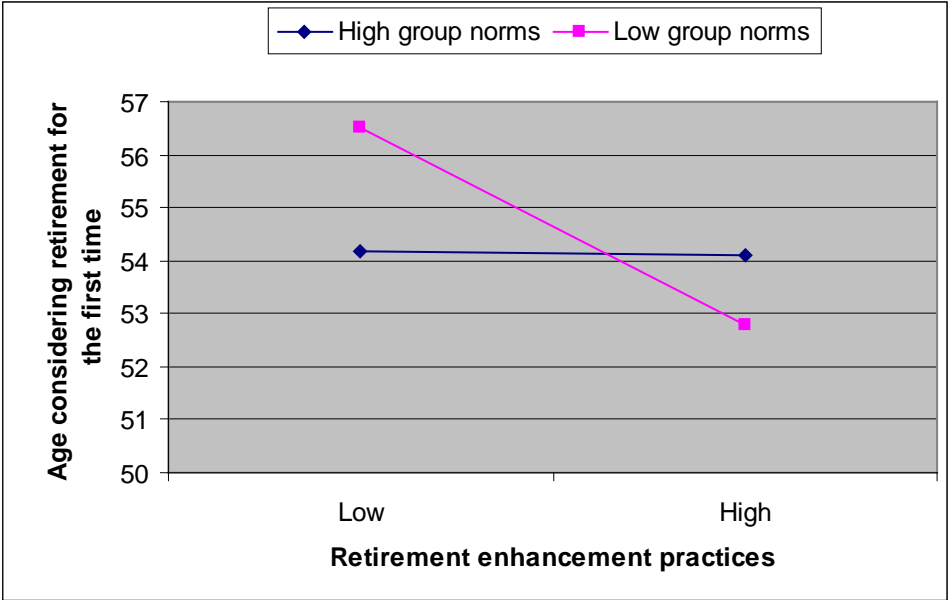


Figure 2. Standardized coefficients for the final partially mediated model

\*\*  $p < .01$ .

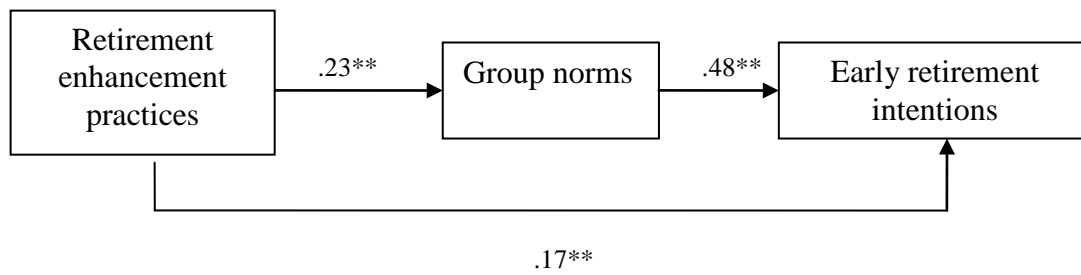


Figure 3. Moderator effects of group norms on the relationship between early retirement practices and retirement age.

